



Atty. Dkt. No. 029996-0306374
Pat. App. Ser. No. 10/697,700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Pownall, et al.

Group Art Unit: to be assigned

Appln. No.: 10/697,700

Examiner: to be assigned

Filed: October 29, 2003

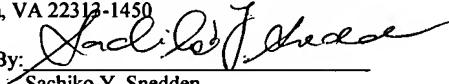
Title: CANCER TREATMENTS BY METABOLIC MODULATIONS

TRANSMITTAL LETTER

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Certificate of Mailing Under 37 C.F.R. §1.8

I hereby certify that this correspondence along with any paper referred to as being attached is being Mailed to Addressee by service of the United States Postal Service addressed to Commissioner for Patents, P.O. Box, 1450, Alexandria, VA 22313-1450

Date: February 24, 2004 By: 
Sachiko Y. Snedden

Sir:

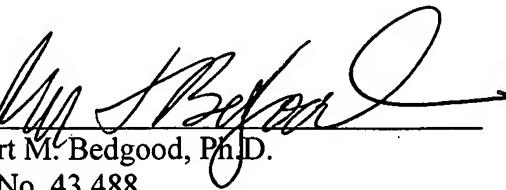
Transmitted herewith for filing are the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. Cited References (137); and
4. Return Postcard.

No fee is believed to be incurred for filing this Inquiry. However, the Commissioner is hereby authorized to charge any fee that may be due in connection with this and the attached papers, or with this application during its entire pendency to or to credit any overpayment to Deposit Account 50-2212. A duplicate of this Transmittal is enclosed.

Respectfully submitted,

Pillsbury Winthrop LLP

By: 
Robert M. Bedgood, Ph.D.
Reg. No. 43,488
Tel. No. (858) 509-4065
Fax No. (858) 509-4010

Date: February 24, 2004

11682 El Camino Real, Suite 200
San Diego, CA 92130-2092
(619) 234-5000



Atty Dkt No. 029996-0306374
Pat. App. Ser. No. 10/697,700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

Pownall, et al.

Group Art Unit: to be assigned

Appln. No.: 10/697,700

Examiner: to be assigned

Filed: October 29, 2003

Title:

CANCER TREATMENTS BY METABOLIC
MODULATIONS

INFORMATION DISCLOSURE STATEMENT

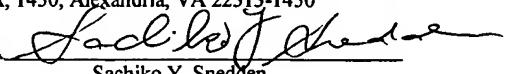
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Attached is Form PTO-1449 listing the enclosed cited references in this statement.

Contingent Request Under Rule 97(c): Should a first action on the merits have been issued on the same day or before this Information Disclosure Statement is filed, please accept this Information Disclosure Statement under Rule 97(c) and charge the requisite Rule 17(p) fee to our Deposit Account No. 50-2212, under the above Atty Dkt. No., and proceed to consider this Information Disclosure Statement.

Certificate of Mailing Under 37 C.F.R. §1.8
I hereby certify that this correspondence along with any paper referred to as being attached is being Mailed to Addressee by service of the United States Postal Service addressed to Commissioner for Patents, P.O. Box, 1450, Alexandria, VA 22313-1450

By: 
Sachiko Y. Snedden

Date: February 24, 2004

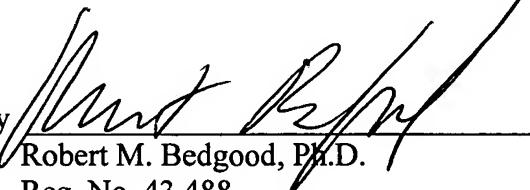
This IDS is intended to be in full compliance with the rules, but should the Examiner find any part of its required content to have been omitted, prompt notice to that effect is earnestly solicited, along with additional time under Rule 97(f), to enable Applicant to comply fully.

This Information Disclosure Statement is not to be construed as a representation that any of the listed citations establishes, by itself or in combination with other information, a prima facie case of unpatentability of any claim in the above-identified patent application. Additionally, this Information Disclosure Statement is not to be construed as a representation that a further search of the art has been made by the Applicant, or that additional information unknown to the Applicant and relevant to the examination of this patent application does not exist.

Consideration of the foregoing and enclosures plus the return of a copy of the enclosed Form PTO-1449 with the Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

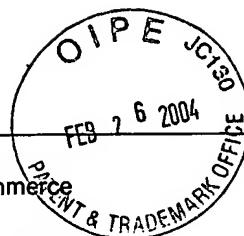
Respectfully submitted,

Pillsbury Winthrop LLP

By 
Robert M. Bedgood, Ph.D.
Reg. No. 43,488

Tel. No. (858) 509-4065
Fax No. (858) 509-4010

11682 El Camino Real
Suite 200
San Diego, CA 92130-2092
(619) 234-5000



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

Examiner: to be assigned Art Unit: to be assigned

Date: February 13, 2004

Page 1 of 13

U.S. PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
AR	2002/0123513 A1	09/2002	Krasner			
BR	2003/0166592 A1	09/2003	Monia et al.			
CR	6,297,359 B1	10/2001	Young et al.			
DR						
ER						
FR						
GR						
HR						
IR						
JR						
KR						
LR						
MR						
NR						

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclosed	No
OR								
PR								
QR								
RR								
SR								
TR								
UR								
VR								
WR								
XR								

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)

To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark OfficeAtty.
Dkt. No.

M#

Client Ref.

029996-0306374

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

Examiner: to be assigned Art Unit: to be assigned

Date: February 13, 2004

Page 2 of 13

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

English

Translation

Initials*			Abstract	Readily Available	Enclosed	No	Enclosed	No
	YR	Bernard-Hélary et al.; Stable Transfection of cDNAs Targeting Specific Steps of Glycogen Metabolism Supports the Existence of Active Gluconeogenesis in Mouse Cultured Astrocytes; GLIA 37; 2002; p. 379-382						
	ZR	Somsak et al.; Glucose Analog Inhibitors of Glycogen Phosphorylases as Potential Antidiabetic Agents: Recent Developments; Current Pharmaceutical Design Vol. 9, No. 15; 2003; p. 1177-1189						
	AAR	Yu et al.; Simultaneous Inhibition of GSK3α and GSK3β Using Hairpin siRNA Expression Vectors; Molecular Therapy Vol. 7, No. 2; 02/2003; p. 228-236						
	ABR	Legler; Glycoside Hydrolases: Mechanistic Information from Studies with Reversible and Irreversible Inhibitors; Advances in Carbohydrate Chemistry and Biochemistry Vol. 48; 1990; p. 319-384						
	ACR	Stambolic et al.; Lithium inhibits glycogen synthase kinase-3 activity and mimics Wingless signalling in intact cells; Current Biology Vol. 6, No. 12; 1996; p. 1664-1668						
	ADR	Robinson et al.; New Potent α-Glucohydrolase Inhibitor MDL 73945 With Long Duration of Action in Rats; Diabates Vol. 40; 06/1991; p. 825-830						
	AER	Wisselaar et al.; Effects of N-hydroxyethyl-1-deoxynojirimycin (BAY m 1099) on the activity of neutral- and acid α-glucosidases in Human Fibroblasts and HepG2 Cells; Clinica Chimica Acta 182; 1989; p. 41-52						
	AFR	Yamanouchi et al.; Metabolic Effects of Proglycosyn; Archives of Biochemistry and Biophysics Vol. 294, No. 2; 05/1992; p. 609-615						
	AGR	Bischoff; Pharmacology of α-glucosidase inhibition; European Journal of Clinical Investigation 24, Suppl. 3; 1994; p. 3-10						
	AHR	Lebovitz; Oral Antidiabetic Agents, The Emergence of α-Glucosidase Inhibitors; Drugs 44, Suppl. 3; 1992; p. 21-28						
	AIR	AI-Habori et al.; The role of cell swelling in the stimulation of glycogen synthesis by insulin; Biochem. J. 282; 1992; p. 789-796						
	AJR	Allaman et al.; Protein Targeting to Glycogen mRNA Expression Is Stimulated by Noradrenaline in Mouse Cortical Astrocytes; GLIA 30; 2000; p. 382-391						
	AKR	Alemzadeh et al.; Chronic suppression of insulin by diazoxide alters the activities of key enzymes regulating hepatic gluconeogenesis in Zucker rats; European Journal of Endocrinology 146; 2002; p. 871-879	✓					

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Date: February 13, 2004 Page **3** of **13**

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

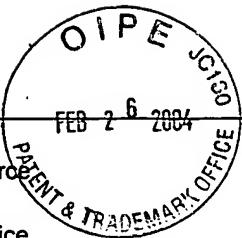
Examiner: to be assigned Art Unit: to be assigned

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English Abstract	Translation Readily Available		
Initials*	Examiner's Initials	Reference Description	Enclosed	No	Enclosed	No
	ALR	Arai et al.; <i>N</i> -Methyl-1-Deoxynojirimycin (MOR-14), an α -Glucosidase Inhibitor, Markedly Reduced Infarct Size in Rabbit Hearts; <i>Circulation</i> ; 04/1998; p. 1290-1297				
	AMR	Chishti et al.; Ultrastructural Alterations Produced in Cockerels after Mercuric Chloride Toxicity and Subsequent Interaction with an Organophosphate Insecticide; <i>Archives of Environmental Contamination and Toxicology</i> 22; 1992; p. 445-451				
	ANR	Baek et al.; Acarviosine-simmondsin, a Novel Compound Obtained from Acarviosine-glucose and Simmondsin by <i>Thermus Maltogenic Amylase</i> and Its <i>in vivo</i> Effect on Food Intake and Hyperglycemia; <i>Biosci. Biotechnol. Biochem.</i> , 37 (3); 2003; p. 532-539				
	AOR	Balbaa et al.; Inhibition of some hepatic lysosomal glycosidases by ethanolamines and phenyl 6-deoxy-6-(morpholin-4-yl)- β -D-glucopyranoside; <i>Carbohydrate Research</i> 317; 1999; p.100-109				
	APR	Bax et al; The Structure of Phosphorylated GSK-3 β Complexed with a Peptide, FRATtide, that Inhibits β -Catenin Phosphorylation; <i>Structure</i> Vol. 9; 12/2001; p. 1143-1152				
	AQR	Beckerbauer et al.; FR900482 class of anti-tumor drugs coss-links oncoprotein HMG I/Y to DNA <i>in vivo</i> ; <i>Chemistry & Biology</i> Vol. 7, No. 10; 2000; p. 805-812				
	ARR	Bergans et al.; Molecular Mode of Inhibition of Glycogenolysis in Rat Liver by the Dihydropyridine Derivative, BAY R3401; <i>Diabetes</i> Vol. 49; 09/2000; p.1419-1426				
	ASR	Berger et al.; A High-Capacity Assay for Activators of Glucose Incorporation into Glycogen in L6 Muscle Cells; <i>Analytical Biochemistry</i> 261; 1998; p. 159-163				
	ATR	Black; Influence of hormones on glycogen and glucose metabolism in embryonic chick intestine; <i>Am. J. Physiol.</i> 254 (<i>Gastrointest. Liver Physiol.</i> 17); 1988; p. G65-G73				
	AUR	Board; <i>N</i> -Acetyl- β -D-glucopyranosylamine 6-phosphate is a specific inhibitor of glycogen-bound protein phosphatase 1; <i>Biochem. J.</i> 328; 1997; p. 695-700	✓			

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref:
	029996-0306374	

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

Examiner: to be assigned Art Unit: to be assigned

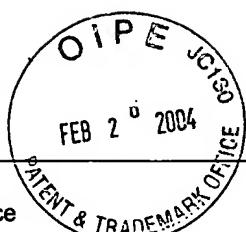
Date: February 13, 2004 Page 4 of 13

OTHER (Including in this order: Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English	Translation	
Initials*	Examiner's	Abstract	Readily Available		
		Enclosed	No	Enclosed	No
	AVR	Bosch et al.; Epidermal growth factor mimics insulin effects in rat hepatocytes; Biochem. J. 239; 1986; p. 523-530			
	AWR	Braun et al.; Mechanism-based Inhibition of Yeast α -Glucosidase and Human Pancreatic α -Amylase by a New Class of Inhibitors; The Journal of Biological Chemistry Vol. 270, No. 45; 11/1995; p. 26778-26781			
	AXR	Breton et al.; The Natural Product Hymenialdisine Inhibits Interleukin-8 Production in U937 Cells by Inhibition of Nuclear Factor- κ B; The Journal of Pharmacology and Experimental Therapeutics Vol. 282, No. 1; 1997; p. 459-466			
	AYR	Carmichael et al.; Glycogen Synthase Kinase-3 β Inhibitors Prevent Cellular Polyglutamine Toxicity Caused by the Huntington's Disease Mutation; The Journal of Biological Chemistry Vol. 227, No. 37; 09/2002; p. 33791-33798			
	AZR	Chambers et al.; Nojirimycin-A Potent Inhibitor of Purified Lysosomal Alpha-Glucosidase from Human Liver; Biochemical and Biophysical Research Communications Vol. 107, No. 4; 08/1982; p. 1490-1496			
	BAR	Cross et al.; Inhibition of glycogen synthase kinase-3 by insulin mediated by protein kinase B; Nature Vol. 378; 12/1995; p. 785-789			
	BBR	Cross et al.; Selective small-molecule inhibitors of glycogen synthase kinase-3 activity protect primary neurones from death; Journal of Neurochemistry 77; 2001; p. 94-102			
	BCR	Cull et al.; Screening for receptor ligands using large libraries of peptides linked to the C terminus of the lac repressor; Proc. Natl. Acad. Sci. USA Vol. 89, Biochemistry; 03/1992; p. 1865-1869			
	BDR	Cwirla et al.; Peptides on phage: A vast library of peptides for identifying ligands; Proc. Natl. Acad. Sci. USA Vol. 87, Biochemistry; 08/1990; p. 6378-6382			
	BER	Dajani et al.; Crystal Structure of Glycogen Synthase Kinase 3 β : Structural Basis for Phosphate-Primed Substrate Specificity and Autoinhibition; Cell Vol. 105; 06/2001; p. 721-732			
	BFR	Damiens et al.; Anti-mitotic properties of indirubin-3'-monoxime, a CDK/GSK-3 inhibitor: induction of endoreplication following prophase arrest; Oncogene 20; 2001; p. 3786-3797	✓		

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	
Applicant: Pownall, et al.		
Appln. No.: 10/697,700		
Filing Date: October 29, 2003		
Examiner: to be assigned		Art Unit: to be assigned

Date: February 13, 2004 Page 5 of 13

Initials*	Examiner's Initials	Reference Citation	English		Translation	
			Abstract	Readily Available	Enclosed	No
	BGR	Detaille et al.; Cellular and Molecular Mechanisms Involved in Insulin's Potentiation of Glycogen Synthase Activity by Metformin; Biochemical Pharmacology Vol. 58; 1999; p. 1475-1486				
	BHR	Dwivedi et al.; Pathology of ochratoxicosis A in young broiler chicks; Research in Veterinary Science 36; 1984; p. 92-103				
	BIR	DeWitt et al.; "Diversomers": An approach to nonpeptide, nonoligomeric chemical diversity; Proc. Natl. Acad. Sci. USA Vol. 90, Chemistry; 08/1993; p. 6909-6913				
	BJR	Donello et al.; Woodchuck Hepatitis Virus Contains a Tripartite Posttranscriptional Regulatory Element; Journal of Virology Vol. 72, No. 6; 06/1998; p. 5085-5092				
	BKR	Dong et al.; Evaluation of Isofagomine and Its Derivatives As Potent Glycosidase Inhibitors; Biochemistry 35; 1996; p. 2788-2795				
	BLR	Elbein; Inhibitors of the Biosynthesis and Processing of N-linked Oligosaccharide Chains; Ann. Rev. Biochem. 56; 1987; p. 497-534				
	BMR	Erb et al.; Recursive deconvolution of combinatorial chemical libraries; Proc. Natl. Acad. Sci. USA Vol. 91, Chemistry; 11/1994; p. 11422-11426				
	BNR	Felici et al.; Selection of Antibody Ligands from a Large Library of Oligopeptides Expressed on a Multivalent Exposition Vector; J. Mol. Biol. 222; 1991; p. 301-310				
	BOR	Field et al.; Histidines, Histamines and imidazoles as glycosidase inhibitors; Biochem. J. 274; 1991; p. 885-889				
	BPR	Fiol et al.; Formation of Protein Kinase Recognition Sites by Covalent Modification of the Substrate; The Journal of Biological Chemistry Vol. 262, No. 29; 10/1987; p. 14042-14048				
	BQR	Fiol et al.; Phosphoserine as a Recognition Determinant for Glycogen Synthase Kinase-3: Phosphorylation of a Synthetic Peptide Based on the G-Component of Protein Phosphatase-1; Archives of Biochemistry and Biophysics Vol. 267, No. 2; 12/1988; p. 797-802				
	BRR	Fiol et al.; Ordered Multisite Protein Phosphorylation, Analysis of Glycogen Synthase Kinase 3 Action Using Model Peptide Substrates; The Journal of Biological Chemistry Vol. 265, No. 11; 04/1990; p. 6061-6065	✓			

Examiner _____ Date Considered: _____

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

Examiner: to be assigned Art Unit: to be assigned

Date: February 13, 2004 Page 6 of 13

OTHER (Including in this order: Author, Title, Periodical Name, Date, Pertinent Pages, etc.)		English Abstract	Translation Readily Available
Initials*	Examiner's Initials	Enclosed	No Enclosed
	BSR	Firsov; Comparative Study of Mechanism of Action of Glucosidase from Bovine Liver and Exogluconase from <i>Aspergillus awamori</i> ; 1979; p. 1757-1766	
	BTR	Flamm et al.; Inulin and Oligofructose as Dietary Fiber: A Review of the Evidence; Critical Reviews in Food Science and Nutrition, 41(5); 2001; p. 353-362	
	BUR	Flåøyen et al.; Glycogen Accumulation and Histological Changes in the Livers of Lambs with Alveld and Experimental Sporidesmin Intoxication; Veterinary Research Communications, 15; 1991; p. 443-453	
	BVR	Flückiger-Isler et al.; Stimulation of rat liver glycogen synthesis by the adenosine kinase inhibitor 5-iodotubercidin; Biochem J. 292; 1993; p. 85-91	
	BWR	Fodor et al.; Multiplexed biochemical assays with biological chips; Nature Vol. 364; 08/1993; p. 555-556	
	BXR	Forlenza et al.; Muscarinic agonists reduce tau phosphorylation in non-neuronal cells via GSK-3β inhibition and in neurons; Journal of Neural Transmission 107; 2000; p. 1201-1212	
	BYR	Fosgerau et al.; Kinetic and Functional Characterization of 1,4-Dideoxy-1,4-imino-D-arabinitol: A Potent Inhibitor of Glycogen Phosphorylase with Anti-hyperglycemic Effect in ob/ob Mice; Archives of Biochemistry and Biophysics Vol. 380, No. 2; 08/2000; p. 274-284	
	BZR	Gallop et al.; Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries; Journal of Medical Chemistry Vol. 37, No. 9; 04/1994; p. 1233-1251	
	CAR	Gergely et al.; Effect of fructose 1-phosphate on the activation of liver glycogen synthase; Biochem. J. 232, 1985; p. 133-137	
	CBR	Göke et al.; Voglibose (AO-128) Is an Efficient α-Glucosidase Inhibitor and Mobilizes the Endogenous GLP-1 Reserve; Digestion 56; 1995; p. 493-501	
	CCR	Halvorson et al.; The Purification and Properties of an α-Glucosidase of <i>Saccharomyces italicus</i> Y1225; Biochimica et Biophysica Acta Vol. 30; 1958; p. 28-40	
	CDR	Hermans et al.; Human Lysosomal α-Glucosidase; The Journal of Biological Chemistry Vol. 266, No. 21, 07/1991; p. 13507-13512	✓

Examiner	Date Considered:
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	
Applicant: Pownall, et al.		
Appln. No.: 10/697,700		
Filing Date: October 29, 2003		
Date: February 13, 2004	Page 7 of 13	Examiner: to be assigned Art Unit: to be assigned

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English Abstract	Translation Readily Available		
Initials*			Enclosed	No	Enclosed	No
	CER	Hers et al.; The protein kinase C inhibitors bisindolylmaleimide I (GF 109203x) and IX (Ro 31-8220) are potent inhibitors of glycogen synthase kinase-3 activity; FEBS Letters 460; 1999; p. 433-436				
	CFR	Hevor et al.; Biochemical and Ultrastructural Study of Glycogen in Cultured Astrocytes Submitted to the Convulsant Methionine Sulfoximine; GLIA 4; 1991; p. 64-69				
	CGR	Fujita et al; Efficacy and safety of Touch Extract, an α -glucosidase inhibitor derived from fermented soybeans, in non-insulin-dependent diabetic mellitus; The Journal of Nutritional Biochemistry 12; 2001; p. 351-356				
	CHR	Hoover et al.; Indole-2-carboxamide Inhibitors of Human Liver Glycogen Phosphorylase; Journal of Medical Chemistry Vol. 41, No. 16; 1998; p. 2934-2938				
	CIR	Ikeda et al.; Homonojirimycin analogues and their glucosides from <i>Lobelia sessilifolia</i> and <i>Adenophora</i> spp. (Campanulaceae); Carbohydrate Research 323; 2000; p.73-80				
	CJR	Houghten et al.; The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides; BioTechniques Vol. 13, No. 3; 1992; p. 412-421				
	CKR	Ilouz et al.; Inhibition of glycogen synthase kinase-3 β by bivalent zinc ions: insight into the insulin-mimetic action of zinc; Biochemical and Biophysical Research Communications 295; 2002; p. 102-106				
	CLR	Itinose et al; N-Acetylcysteine Stimulates Hepatic Glycogen Deposition in the Rat; Research Communications in Chemical Pathology and Pharmacology Vol. 83, No. 1; 01/1994; p. 87-92				
	CMR	Kaiser et al.; The Cyclin-Dependent Kinase (CDK) Inhibitor Flavopiridol Inhibits Glycogen Phosphorylase; Archives of Biochemistry and Biophysics Vol. 386, No. 2; 02/2001; p. 179-187				
	CNR	Kato-Weinstein et al; Effects of dichloroacetate on glycogen metabolism in B6C3F1 mice; Toxicology 130; 1998; p. 141-154				
	COR	Kay et al.; Evidence for gene transfer and expression of factor IX in haemophilia B patients treated with an AAV vector; Nature Genetics Vol. 24; 03/2000; p. 257-261		✓		

Examiner _____ Date Considered: _____

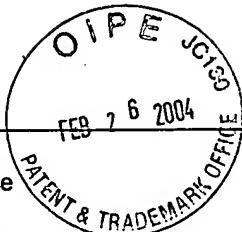
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 (modified) To: U.S. Department of Commerce (PW FORM PAT-1449) Patent and Trademark Office		Atty. Dkt. No.	M#	Client Ref.
			029996-0306374	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant: Pownall, et al.		
Date: February 13, 2004 Page 8 of 13		Appln. No.: 10/697,700 Filing Date: October 29, 2003 Examiner: to be assigned Art Unit: to be assigned		
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)		English Abstract		Translation Readily Available
Initials*		Enclosed	No	Enclosed No
	CPR	Kennerdell et al.; Use of dsRNA-Mediated Genetic Interference to Demonstrate that <i>frizzled</i> and <i>frizzled 2</i> Act in the Wingless Pathway; Cell Vol. 95; 12/1998; p. 1017-1026		
	CQR	Kim et al.; Comparative Study of the Inhibition of α -Glucosidase, α -Amylase, and Cyclomaltodextrin Glucanosyltransferase by Acarbose, Isoacarbose, and Acarviosine-Glucose; Archives of Biochemistry and Biophysics Vol. 371, No. 2; 11/1999; p. 277-283		
	CRR	Klein et al.; A molecular mechanism for the effect of lithium on development; Proc. Natl. Acad. Sci. USA Vol. 93, Developmental Biology; 08/1996; p. 8455-8459		
	CSR	Krasikov et al.; α -Glucosidases; Biochemistry (Moscow) Vol. 66, No. 3; 2001; p. 267-281		
	CTR	Kruger et al.; 90-Day Oral Toxicity Study of D-Tagatose in Rats; Regulatory Toxicology and Pharmacology 29; 1999; p. S1-S10		
	CUR	Kwon et al.; Cyclo(Dehydroala-L-Leu), an α -Glucosidase Inhibitor from <i>Penicillium</i> sp. F70614; The Journal of Antibiotics Vol. 53, No. 9; 09/2000; p. 954-958		
	CVR	Laloux et al.; On the mechanism by which glucocorticoids cause the activation of glycogen synthase in mouse and rat livers; Eur. J. Biochem. 136; 1983; p. 175-181		
	CWR	Lam et al.; A new type of synthetic peptide library for identifying ligand-binding activity; Nature Vol. 354; 11/1991; p. 82-84		
	CXR	Latsis et al.; Diverse effects of two allosteric inhibitors on the phosphorylation state of glycogen phosphorylase in hepatocytes; Biochem. J. 368; 2002; p. 309-316		
	CYR	Leclerc et al.; Indirubins Inhibit Glycogen Synthase Kinase-3 β and CDK5/P25, Two Protein Kinases Involved in Abnormal Tau Phosphorylation in Alzheimer's Disease; The Journal of Biological Chemistry Vol. 276, No. 1; 01/2001; p. 251-260		
	CZR	Legler et al.; N ¹ -Alkyl-D-gluconamidines: Are they 'perfect' mimics of the first transition state of glucosidase action?; Carbohydrate Research 292; 1996; p. 103-115		

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref:
029996-0306374		
Applicant: Pownall, et al.		
Appln. No.: 10/697,700		
Filing Date: October 29, 2003		
Examiner: to be assigned		Art Unit: to be assigned

Date: February 13, 2004 Page 9 of 13

OTHER (Including in this order: Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English Abstract	Translation Readily Available		
Initials*			Enclosed	No	Enclosed	No
	DAR	Lembcke et al.; Lysosomal storage of glycogen as a sequel of α -glucosidase inhibition by the absorbed deoxynojirimycin derivative emiglitate (BAYo1248); Research in Experimental Medicine 191; 1991; p. 389-404	/			
	DBR	Lingohr et al.; Dichloroacetate Stimulates Glycogen Accumulation in Primary Hepatocytes through an Insulin-Independent Mechanism; Toxicological Sciences 68; 2002; p. 508-515				
	DCR	Lochhead et al.; Inhibition of GSK-3 Selectively Reduces Glucose-6-Phosphatase and Phosphoenolpyruvate Carboxykinase Gene Expression; Diabetes 50; 2001; p. 937-946				
	DDR	Lindgren et al.; NN 42-1007 is a novel, potent inhibitor of hepatic glycogen phosphorylase, and of hepatocyte glycogenolysis; Diabetes Abstract Book 56 th Annual Meeting and Scientific Sessions; 05/1996; p. 142A:521				
	DER	Martinez et al.; Glycogen Synthase Kinase 3 (GSK-3) Inhibitors as New Promising Drugs for Diabetes, Neurodegeneration, Cancer, and Inflammation; Medicinal Research Reviews, Vol. 22, No. 4; 2002; p. 373-384				
	DFR	Martinez et al.; First Non-ATP Competitive Glycogen Synthase Kinase 3 β (GSK-3 β) Inhibitors: Thiadiazolidinones (TDZD) as Potential Drugs for the Treatment of Alzheimer's Disease; Journal of Medical Chemistry Vol. 45, No. 6; 2002; p. 1292-1299				
	DGR	Massillon et al.; Demonstration of a Glycogen/Glucose 1-Phosphate Cycle in Hepatocytes from Fasted Rats; The Journal of Biologiacal Chemistry Vol. 270, No. 33; 08/1995; p. 19351-19356				
	DHR	Matsumoto et al.; A Novel Method for the Assay of α -Glucosidase Inhibitory Activity Using a Multi-channel Oxygen Sensor; Analytica Sciences Vol. 18; 12/2002; p. 1315-1319				
	DIR	Matsuura et al.; α -Glucosidase Inhibitor from the Seeds of Balsam Pear (<i>Momordica charantia</i>) and the Fruit Bodies of <i>Grifola frondosa</i> ; Biosci. Chiotechnol. Biochem. 66 (7); 2002; p. 1576-1578				
	DJR	Meijer et al.; Inhibition of cyclin-dependent kinases, GSK-3 β and CK1 by hymenialdinsine, a marine sponge constituent; Chemistry & Biology Vol. 7, No. 1; 2000; p. 51-63				

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

Examiner: to be assigned Art Unit: to be assigned

Date: February 13, 2004 Page 10 of 13

OTHER (Including in this order: Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English	Translation
Initials*	Examiner's		Abstract	Readily Available
			Enclosed	No
	DKR	Mettey et al.; Aloisines, a New Family of CDK/GSK-3 Inhibitors, ASR Study, Crystal Structure in Complex with CDK2, Enzyme Selectivity, and Cellular Effects; Journal of Medical Chemistry Vol. 46, No. 2; 2003; p. 222-236		
	DLR	Mitchell et al.; Ternary Complex Crystal Structure of Glycogen Phosphorylase with the Transition State Analogue Nojirimycin Tetrazole and Phosphate in the T and R States; Biochemistry Vol. 35, No. 23; 1996; p. 7341-7355		
	DMR	Molyneux et al.; 6-Epicastanospermine, a Novel Indolizidine Alkaloid That Inhibits α -Glucosidase; Archives of Biochemistry and Biophysics Vol. 251; No. 2; 12/1986; p. 450-457		
	DNR	Muraoka et al.; Synthesis of a Nitrogen Analogue of Salacinol and Its α -Glucosidase Inhibitory Activity; Chem. Pharm. Bull. Vol. 49, No. 11; 11/2001; p. 1503-1505		
	DOR	Nakai et al.; Adeno-Associated Viral Vector-Mediated Gene Transfer of Human Blood Coagulation Factor IX Into Mouse Liver; Blood, Vol. 91, No. 12; 06/1998; p. 4600-4607		
	DPR	Nakao et al.; Callyspongyic Acid, a Polyacetylenic Acid Which Inhibits α -Glucosidase, from the Marine Sponge <i>Callyspongia truncata</i> ; Journal of Natural Products Vol. 65, No. 6; 2002; p. 922-924		
	DQR	Oikonomakos et al.; The design of potential antidiabetic drugs: experimental investigation of a number of β -D-glucose analogue inhibitors of glycogen phosphorylase; European Journal of Drug Metabolism and Pharmacokinetics, No. 3; 1994; p. 185-192		
	DRR	Oikonomakos et al.; Binding of <i>N</i> -acetyl- <i>N'</i> - β -D-glucopyranosyl urea and <i>N</i> -benzoyl- <i>N'</i> - β -D-glucopyranosyl urea to glycogen phosphorylase <i>b</i> ; Eur. J. Biochem. 269; 2002; p. 1684-1696		
	DSR	Oikonomakos et al.; Flavopiridol Inhibits Glycogen Phosphorylase by Binding at the Inhibitor Site; The Journal of Biological Chemistry Vol. 275, No. 44; 11/2000; p. 34566-34573		
	DTR	Oikonomakos et al.; Kinetic and Crystallographic Studies of Glucopyranosylidene Spirothiohydantoin Binding to Glycogen Phosphorylase B; Bioorganic & Medicinal Chemistry 10; 2002; p. 261-268		

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
 To: U.S. Department of Commerce
 (PW FORM PAT-1449)
 Patent and Trademark Office

Atty.
 Dkt. No.

M#

Client Ref.

029996-0306374

Applicant: Pownall, et al.

Appln. No.: 10/697,700

Filing Date: October 29, 2003

Examiner: to be assigned Art Unit: to be assigned

Date: February 13, 2004

Page

11 of

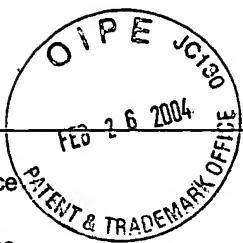
13

OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English	Abstract	Translation	
Initials*			Enclosed	No	Enclosed	No
	DUR	Oikonomakos et al.; Allosteric inhibition of glycogen phosphorylase a by the potential antidiabetic drug 3-isopropyl 4-(2-chlorophenyl)-1,4-dihydro-1-ethyl-2-methyl-pyridine-3,5,6-tricarboxylate; Protein Science 8; 1999; p. 1930-1945				
	DVR	Okazaki et al.; A repeated 28-day oral dose toxicity study of genistein in rats, based on the 'Enhanced OECD Test Guideline 407' for screening endocrine-disrupting chemicals; Arch Toxicol 76; 2002; p. 553-559				
	DWR	Papandréou et al.; The α -Glucosidase Inhibitor 1-Deoxynojirimycin Blocks Human Immunodeficiency Virus Envelope Glycoprotein-Mediated Membrane Fusion at the CXCR4 Binding Step; Molecular Pharmacology, Vol. 61, No. 1; 2002; p. 186-193				
	DXR	Pinotsis et al.; The binding of β - and γ -cyclodextrins to glycogen phosphorylase b: Kinetic and crystallographic studies; Protein Science Vol. 12; 2003; p. 1914-1924				
	DYR	Rhinehart et al.; Quantitative Relationship of Lysosomal Glycogen Accumulation to Lysosomal α -Glucosidase Inhibition in Castanospermine-Treated Rats; Biochemical Pharmacology, Vol. 41, No. 2; 1991; p. 223-228				
	DZR	Rusbridge et al.; 3,4-Dichloroisocoumarin, a serine protease inhibitor, inactivates glycogen phosphorylase b; FEBS Letters Vol. 268, No. 1; 07/1990; p. 133-136				
	EAR	Saunier et al.; Inhibition of N-linked Complex Oligosaccharide Formation by 1-Deoxynojirimycin, an inhibitor of Processing Glucosidases; The journal of Biological Chemistry Vol. 257, No. 23; 12/1982; p. 14155-14161				
	EBR	Rathi et al.; The Effect of <i>Momordica charantia</i> and <i>Mucuna pruriens</i> in Experimental Diabetes and their Effect on Key Metabolic Enzymes Involved in Carbohydrate Metabolism; Phytotherapy Research 16; 2002; p. 236-243				
	ECR	Ring et al.; Selective Glycogen Synthase Kinase 3 Inhibitors Potentiate Insulin Activation of Glucose Transport and Utilization in Vitro and in Vivo; Diabetes, Vol. 52; 03/2003; p. 588-595				
	EDR	Roden et al.; Application of NMR Spectroscopy to Study Muscle Glycogen Metabolism in Man; Annu. Rev. Med. 50; 1999; p. 277-290				
	EER	Rousset et al.; Presence and Cell Growth-related Variations of Glycogen in Human colorectal Adenocarcinoma Cell Lines in Culture; Cancer Research 39; 02/1979; p. 531-534				

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	
Applicant: Pownall, et al.		
Appln. No.: 10/697,700		
Filing Date: October 29, 2003		
Date: February 13, 2004	Page 12 of 13	Examiner: to be assigned Art Unit: to be assigned

OTHER (Including in this order: Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English Abstract	Translation Readily Available
Initials*			Enclosed	No Enclosed No
	EFR	Ryves et al.; Glycogen Synthase Kinase-3 Inhibition by Lithium and Beryllium Suggests the Presence of Two Magnesium Binding Sites; Biochemical and Biophysical Research Communications Vol. 290, No. 3; 2002; p. 967-972		
	EGR	Ryves et al.; Lithium Inhibits Glycogen Synthase Kinase-3 by Competition for Magnesium; Biochemical and Biophysical Research Communications Vol. 280, No. 3; 2001; p. 720-725		
	EHR	San Juan Serrano et al.; Caffeine Inhibition of Glycogen Phosphorylase from Mytilus galloprovincialis Mantle Tissue; Int. J. Biochem. Cell Biol., Vol. 27, No. 9; 1995; p. 911-916		
	EIR	Scott et al.; Searching for Peptide Ligands with an Epitope Library; Science, Vol. 249; 07/1990; p. 386-390		
	EJR	Shiota et al.; Inhibition of glycogenolysis enhances gluconeogenic precursor uptake by the liver of conscious dogs; Am. J. Physiol. 273 (Endocrinol. Metab. 36); 1997; p. E868-E879		
	EKR	Smith et al.; 3-Anilino-4-arylmaleimides: Potent and Selective Inhibitors of Glycogen Synthase Kinase-3 (GSK-3); Bioorganic & Medicinal Chemistry Letters 11; 2001; p. 635-639		
	ELR	Sou et al.; α -Glucosidase Inhibitors with a 4,5,6,7-Tetrachlorophthalimide Skeleton Pendant with a Cycloalkyl or Dicarba-closo-dodecaborane Group; Chem. Pharm. Bull. Vol. 49, No. 6; 06/2001; p. 791-793		
	EMR	Sugita et al.; Inducible nitric oxide synthase plays a role in LPS-induced hyperglycemia and insulin resistance; Am. J. Physiol. Endocrinol. Metab. 282; 2002; p. E386-E394		
	ENR	Takeuchi et al.; Inhibitory Effect of Pseudo-Aminosugars on Oligosaccharide Glucosidases I and II and on Lysosomal α -Glucosidase from Rat Liver; J. Biochem. 108; 1990; p. 42-46		
	EOR	Tsujii et al.; Nectrisine Is a Potent Inhibitor of α -Glucosidases, Demonstrating Activities Similarly at Enzyme and Cellular Levels; Biochemical and Biophysical Research Communications Vol. 220, No. 2; 1996; p. 459-466		
	EPR	ter Haar et al.; Structure of GSK3 β reveals a primed phosphorylation mechanism; Nature Structural Biology, Vol. 8, no. 7; 07/2001; p. 593-596		

Examiner	Date Considered:
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



FORM PTO-1449 (modified)
To: U.S. Department of Commerce
(PW FORM PAT-1449)
Patent and Trademark Office

Atty. Dkt. No.	M#	Client Ref.
	029996-0306374	
Applicant: Pownall, et al.		
Appln. No.: 10/697,700		
Filing Date: October 29, 2003		
Examiner: to be assigned		Art Unit: to be assigned

Date: February 13, 2004 Page 13 of 13

OTHER (Including in this order: Author, Title, Periodical Name, Date, Pertinent Pages, etc.)			English	Translation	
Examiner's Initials*		Abstract	Readily Available		
		Enclosed	No	Enclosed	No
	EQR	Thomas et al.; A GSK3-binding peptide from FRAT1 selectively inhibits the GSK 3-catalysed phosphorylation of Axin and β-catenin; FEBS Letters 458; 1999; p. 247-251			
	ERR	Tropea et al.; Australine, a Pyrrolizidine Alkaloid That Inhibits Amyloglucosidase and Glycoprotein Processing; Biochemistry Vol. 28, No. 5; 1989; p. 2027-2034			
	ESR	Van Schaftingen et al.; Effect of proglycosyn and other phenolic compounds on glycogen metabolism in isolated hepatocytes; Eur. J. Biochem. 218; 1993; p. 745-751			
	ETR	Vivinus et al.; An element within the 5' untranslated region of human <i>Hsp70</i> mRNA which acts as a general enhancer of mRNA translation; Eur. J. Biochem. 268; 2001; p. 1908-1917			
	EUR	Waagepetersen et al.; The effects of isofagomine, a potent glycogen phosphorylase inhibitor, on glycogen metabolism in cultured mouse cortical astrocytes; Neurochemistry International 36; 2000; p. 435-440			
	EVR	Watson et al.; Design of Inhibitors of Glycogen Phosphorylase: A Study of α- and β-C-Glucosides and 1-Thio-β-D-glucose Compounds; Biochemistry Vol. 33, No. 19; 1994; p. 5745-5758			
	EWR	Wang et al.; Cytotoxic effects of cantharidin on the growth of normal and carcinoma cells; Toxicology 147; 2000; p. 77-87			
	EXR	Wigler et al.; Transfer of Purified Herpes Virus Thymidine Kinase Gene to Cultured Mouse Cells; Cell Vol. 11; 05/1977; p. 223-232			
	EYR	Withers; Pyridoxal(5')diphospho(1)-α-D-glucose The Journal of Biological Chemistry, Vol. 260, No. 2; 01/1985; p. 841-845			
	EZR	Yoshikawa et al.; Absolute Stereostructure of Potent α-Glucosidase Inhibitor, Salacinol, with Unique Thiosugar Sulfonium Sulfate Inner Salt Structure from <i>Salacia reticulata</i> ; Bioorganic & Medicinal Chemistry, 10; 2002; p. 1547-1554			
	FAR	Yan et al.; The Human Asid α-Glucosidase Gene Is a Novel Target of the Notch-1/Hes-1 Signaling Pathway; The Journal of Biological Chemistry, Vol. 227, No. 33; 08/2002; p. 29760-29764			
	FBR	Zuckermann et al.; Discovery of Nanomolar Ligands for 7-Transmembrane G-Protein-Coupled Receptors from a Diverse N-(Substituted)glycine Peptoid Library; Journal of Medical Chemistry No. 37, No. 17; 1994; p. 2678-2685			

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.